

CLAIMS

1. Catalytic composition for deodorizing or oxidizing
5 purposes which comprises a coating of a coating
material on a support and is obtainable by applying the
coating material, comprising (1) a polycondensate of
(A) one or more silanes of the general formula (I)

10 $R_a\text{-Si-X}_{(4-a)}$ (I)

in which the radicals R are identical or different
and are non-hydrolysable groups, the radicals X
are identical or different and are hydrolysable
15 groups or hydroxyl groups and a has the value 0,
1, 2 or 3, with a being greater than 0 for at
least 50 mol% of the silanes, or an oligomer
derived therefrom,
(B) if desired, one or more compounds of glass-forming
20 elements,
and (2) particles of one or more transition metal
oxides, the weight ratio of transition metal oxide
particles to polycondensate being from 10:1 to 1:10, to
the support and subjecting the applied coating material
25 to thermal treatment.

2. Catalytic composition according to Claim 1,
characterized in that a is greater than 0 for from 50
to 95 mol% of the silanes.

30 3. Catalytic composition according to Claim 1 or 2,
characterized in that the transition metal oxide is
selected from the oxides of the metals La, Ce, Ti, Zr,
V, Cr, Mo, W, Mn, Fe, Co, Ni, Cu, Ag and Zn or mixtures
35 thereof.

4. Catalytic composition according to one of Claims 1
to 3, characterized in that the particle diameter of

the transition metal oxide particles is from 10 nm to 20 μm .

5. Catalytic composition according to one of Claims 1
5 to 4, characterized in that the thickness of the
coating is from 0.01 to 500 μm .

10. Catalytic composition according to one of Claims 1
to 5, characterized in that the support is composed of
metal, metal oxide, glass, glass ceramic, ceramic or
porous material.

15. Catalytic composition according to one of Claims 1
to 6, characterized in that the coating material,
immediately or after drying, has been treated at an air
temperature range from 200 to 700°C.

20. Catalytic composition according to one of Claims 1
to 7, characterized in that the coating material
additionally includes inorganic particles.

25. Catalytic composition according to one of Claims 1
to 8, characterized in that the coating formed from the
coating material is porous.

10. Process for preparing a catalytic composition for
deodorizing or oxidizing purposes which comprises a
coating of a coating material on a support, wherein (1)
a polycondensate of
30 (A) one or more silanes of the general formula (I)



35. in which the radicals R are identical or different
and are non-hydrolysable groups, the radicals X
are identical or different and are hydrolysable
groups or hydroxyl groups and a has the value 0,
1, 2 or 3, with a being greater than 0 for at

least 50 mol% of the silanes, or an oligomer derived therefrom, and

(B) if desired, one or more compounds of glass-forming elements

5 is mixed with (2) particles of one or more transition metal oxides in a weight ratio of transition metal oxide particles to polycondensate of from 10:1 to 1:10, a coating material comprising this mixture is applied to the support and, immediately or after drying, is
10 subjected to heat treatment.

11. Use of the catalytic composition according to one of Claims 1 to 9 for deodorizing.

15 12. Use of the catalytic composition according to one of Claims 1 to 9 for oxidizing organic components or carbon.

A^{100}
 $A_1 >$